

Rec. zool. Surv. India: 114(Part-1): 189-190, 2014

Short Communication

ON THE OCCURRENCE OF *LUTJANUS VITTA* (QUOY & GAIMARD, 1828) (PISCES: PERCIFORMES: LUTJANIDAE) FROM LAKSHADWEEP, INDIA

INTRODUCTION

During the course of the identification of the fishes of old collections in the holding of the National Zoological Collections, Zoological Survey of India, one specimen of the genus *Lutjanus* Bloch, 1790 was found. The specimen was compared with known species of the genus and the identity of this species is confirmed to be *Lutjanus vitta* (Quoy & Gaimard, 1828) which is commonly known as Brown stripe snapper. The snappers (Pisces: Perciformes: Lutjanidae) are well known as food fishes throughout their occurrence and are of considerable commercial value. These fishes are usually found in marine water, although a few species are also available in estuaries.

L. vitta is widely distributed species in the Indo-West Pacific region. A perusal of the existing literature (Jones & Kumaran, 1980 & Rao, 1991) on the fishes of the family Lutjanidae from Lakshadweep shows that L. vitta is not yet reported from this Islands. So, the discovery of this species from Lakshadweep forms the first record from this Islands, although it has already been recorded from Kerala coast (Barman and Mishra, in press). A brief description of the species with its geographical distribution, maximum size, interest to fisheries and habitat and ecology is furnished here to record its first occurrence from Lakshadweep.

Lutjanus vitta (Quoy & Gaimard, 1824) (Brown striped snapper)

1824. Serranus vitta Quoy & Gaimard, Voy. Uranie Zool: 58 (Waigiu)

2001. *Lutjanus vitta*, Anderson & Allen, The diving marine resources of the Western Pacific, **5**(3): 2896, pl.IX, 59.

Materials Examined: ZSI F10869/2, 1 ex., 210 mm. SL; Pitti Island, Lakshadweep, India; Dr. Ch.Satyanarayan & party; 26.02.2006.

Diagnostic Features: D X, 12; A III, 8; P. 16. Gill rakers 10-11 (including rudiments) on lower arm of first arch, total rakers 17-18. Body somewhat deep, its depth 3.0 and head length 2.63 times in standard length. Head profile somewhat convex and greater than body depth. Eye diameter 4 times in head length. Suborbital width almost half of eye diameter, 8.7 times in head length. Interorbital space convex, almost equal to eye diameter. Margins of preopercle finely serrate. Preopercular notch and knob poorly developed. Preorbital region between mouth and eyes without scales but scale present on cheek and preopercle. Transverse scale rows on cheek 8. Teeth patch on vomer diamond-shaped; tongue with a patch of granular teeth. Posterior profile of dorsal and anal fins angular. Caudal fin slightly emarginate. Longitudinal scale rows above lateral line raising obliquely to dorsal profile. Soft dorsal and anal fin bases with a scaly sheath.

Body along dorsal profile and upper side brownish in preservation, lower side and abdomen whitish. Longitudinal narrow stripes along sides of the body, those above lateral line slanting posteriorly towards the base of dorsal fin. A dark blackish stripe along middle of sides, extending from behind eye to upper part of caudal peduncle. All fins yellow in colour in life. 190 Rec. zool. Surv. India

Geographical distribution: India: Andhra Pradesh, Tamil Nadu, Kerala, Gujarat and Andaman & Nicobar Islands, Elsewhere: Mainly western Pacific and eastern Indian Ocean from New Caledonia and Gilbert Islands to southern India, extending northward to southern Japan; also found in the Seychelles (Anderson & Allen, 2001).

Maximum size: It attains 40 cm, but usually found around 25 cm in total length.

Interest to fisheries: It is an edible fish generally common along its range of occurrence.

Remarks: Although Allen (1985) stated the preorbital width of *L. vitta* to be about equal to eye diameter, we observed that not only in the above mentioned Lakshadweep specimen but also in several specimens along Indian coast, the preorbital width is about half of the eye diameter but clearly less than 9 times of head length so that it cannot be considered as *Lutjanus lutjanus* Bloch, which has more gill rakers (17 to 19) on lower limb of first arch. In the preserved specimen

the dark broad black band from eye to caudal fin gets faded up and we need to depend on gill raker counts, preorbital width and vomerine tooth patch to confirm the identity.

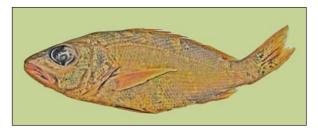


Fig. 1. Photograph of *Lutjanus vitta* (Quoy & Gaimard), ZSI F10869/2, 210 mm. SL

ACKNOWLEDGMENTS

The authors are thankful to Dr. K. Venkataraman, Director and Dr. K.C. Gopi, Joint Director-in-charge of the Fish Division, Zoological Survey of India, Kolkata for their encouragement and facilities. We also thankful to Dr. P.M. Sureshan, Scientist-C, Western Ghat Regional Center, Z.S.I. Kozhikode for helping us in understanding a Malayam Publication.

REFERENCES

Allen, G.R. 1985. FAO Species catalogue, Vol. 6. The Snappers of the World. An annotated and illustrated catalogue of the lutjanid species known to date. *FAO Fish. Synop.*, (125) **6**: 1-208.

Anderson, W.D. Jr. and Allen, G.R. 2001. Lutjanidae. In: Carpenter, K.E. and Niem, V.H (eds.). FAO species identification guide for fishery purposes. The living marine resources of the Western Pacific. Volume 5. Bony fishes, Part 3 (Menidae to Pomacentridae): 2840-2918.

Barman, R.P. and Mishra, S.S. (in press). An annotated checklist of the snappers (Pisces: Perciformes: Lutjanidae) of India. *Rec. zool. Surv. India, Occ. Pap.*

Jones, S. & Kumaran, M. 1980. *Fishes of Laccadive Archipelago*. Nature Conservation and Aquatic Science, Kerala: 760 pp.

Rao, G.C. 1991. Lakshadweep: General features. *Fauna of Lakshadweep, State Fauna Series*, 2: 5-40 (Zoological Survey of India, Kolkata).

R. P. Barman, S. C. Saren And S. S. Mishra* Fish Division, Zoological Survey of India, F.P.S.Building, Kolkata-700016, India

*Email: subhrendumishra@gmail.com

Manuscript Received: 23rd October, 2013; Accepted: 21st January, 2014.